## Automated Ball Valves, 3-Way SS Flange

### Electric and Pneumatic Actuators

#### The Series 3BV2 Incorporates a Full Port Design for Maximum Flow Rates with Minimal Pressure Drop. Features Include a Blowout Proof Stem for Added Safety and Reinforced RTFE Seals and Seats for Longer Life and Leak-Free Operation. The Four-Seat Design Allows for High Cyclic Capabilities and Tight Shut-off in Any Position. Perfect for Mixing or Diverting Services in the Food and Chemical Processing Industries.

The 3BV is an economical automated valve package with either an electric or pneumatic actuator. Electrically actuated models are weatherproof, NEMA 4, powered by standard 115 VAC supply, and are available in either two-position or proportional control. Two-position actuators use the 115 VAC input to drive each of the valve ports open or closed, while the modulating actuator accepts a 4 to 20 mA input for infinite valve positioning. Actuator features include thermal overload protection to withstand stall conditions, visual position indicators and permanently lubricated gear train.

The pneumatic double acting actuator uses an air supply to drive each of the actuator ports. Spring return pneumatic actuators use the air supply to drive the valve position. Also available is the SV3 solenoid valve to electrically switch the supply pressure between the air supply ports. Actuators are constructed of anodized aluminum and are epoxy coated for years of corrosion free service.

### HOW TO ORDER:

1. Select Model No. to specify pipe size and actuator.
2. Choose a Port Configuration to determine valve flow path.

**Example: 3BV2SR304F-T2**

#### Specifications

- **Service:** Compatible liquids, gases or steam.
- **Body:** 3-Way.
- **Line Size:** 1/2" to 4".
- **Electrical Connections:** 150 psi Flange.
- **Pressure Limit:** 275 psi (19 bar).
- **Wetted Materials:** Body, end cap, stem, stem seal; RTFE.
- **Temperature Limit:** -40 to 232°F (-40°C to 116°C).
- **Other Materials:** Body seal, O-ring, stem O-ring; Fluoroelastomer.

### Actuators

- **Electric Power Requirements:** 115 VAC, 60 Hz, single phase. Optional 220 VAC, 24 VDC, and 48 VDC.
- **Power Consumption (Locked Rotor Current):** Two position: U11: 55 A; U12, U13, U14: 75 A; U15, U16, U17: 1A; U18: 2.6A. Modulating: U12, V13, V14: 2.6A; DA1: 7-25/32A; SR5: 2-1/2A; UA12: 3-17/32A; VR12: 3-11/64A; Modulating: V12: 2.6A; SR7: 0.78 sec.; SR5: 0.46 sec.; DA4: 0.22 sec.; V17: 0.12 sec.
- **Duty Cycle:** Two position: U11: 75%.; U12, U13, U14, U15, U16, U17: 25%.; U18: 100%; Modulating: U12, V13, U14, V15, V16, V17: 75%; V18: 100%.

### Enclosure Rating


### Housing Material

- Aluminum: With thermal bonding polyester powder finish.
- **Temperature Limit:** 0 to 150°F (-18 to 65°C).
- **Conduit Connection:** 1/2" female NPT.
- **Modulating Input:** 4 to 20 mA.
- **Standard Features:** Manual override and visual position indicator except modulating units.

#### Pneumatic "DA" and "SR" Series

- **Type:** DA series is double acting and SR series is spring return (rack and pinion).
- **Normal Supply Pressure:** 80 psig (5.5 bar).
- **Maximum Supply Pressure:** 120 psig (8 bar).
- **Air Connections:** 1/4" female NPT.
- **Cycle Time (per 90°):** DA1: 0.6 sec.; DA2: 0.4 sec.; DA3: 0.8 sec.; DA4: 1.2 sec.; SR2: 0.8 sec.; SR3: 1.4 sec.; SR4: 2.2 sec.; SR5: 3.3 sec.; SR6: 4.6 sec.; SR7: 7.8 sec.
- **Housing Material:** Anodized aluminum body and epoxy coated aluminum end caps.
- **Temperature Limit:** 4 to 180°F (-20 to 82°C).
- **Accessory Mounting:** NAMUR standard.
- **Standard Features:** Visual position indicator.

### Specifications Table

<table>
<thead>
<tr>
<th>Cv</th>
<th>Port Configuration</th>
<th>Double Acting Pneumatic</th>
<th>Spring Return Pneumatic</th>
<th>Two Position Electric</th>
<th>Modulating Electric</th>
<th>OPTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2&quot;</td>
<td>T-Type</td>
<td>3BV2DA202F1</td>
<td>3BV2SR202F1</td>
<td>3BV2UI102F1</td>
<td>3BV2V1202F1</td>
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</tr>
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<td>3/4&quot;</td>
<td>T-Type</td>
<td>3BV2DA203F1</td>
<td>3BV2SR303F1</td>
<td>3BV2UI203F1</td>
<td>3BV2V1203F1</td>
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<tr>
<td>1&quot;</td>
<td>A-B</td>
<td>3BV2DA204F1</td>
<td>3BV2SR404F1</td>
<td>3BV2UI204F1</td>
<td>3BV2V1204F1</td>
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<td>1-1/2&quot;</td>
<td>A-C</td>
<td>3BV2DA205F1</td>
<td>3BV2SR505F1</td>
<td>3BV2UI205F1</td>
<td>3BV2V1205F1</td>
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</tr>
<tr>
<td>2&quot;</td>
<td>B-C</td>
<td>3BV2DA407F1</td>
<td>3BV2SR807F1</td>
<td>3BV2UI1807F1</td>
<td>3BV2V1807F1</td>
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<td>2-1/2&quot;</td>
<td>A-B</td>
<td>3BV2DA708F1</td>
<td>3BV2SR808F1</td>
<td>3BV2UI1808F1</td>
<td>3BV2V1810F1</td>
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<td>3BV2DA709F1</td>
<td>3BV2SR809F1</td>
<td>3BV2UI1807F1</td>
<td>3BV2V1807F1</td>
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<td>A-B</td>
<td>3BV2DA710F1</td>
<td>3BV2SR810F1</td>
<td>3BV2UI1810F1</td>
<td>3BV2V1810F1</td>
<td></td>
</tr>
</tbody>
</table>

*Complete Model includes Port configurations - see “How to Order” above. For filters or regulators see pages 562 through 566.

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